IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of: Confirmation Number: 1139

Karl E. ELLIOTT et al.

Application No.: **10/040,150**   Group Art Unit: 2151

Filed: January 2, 2002   Examiner: TRAN, N.V.

Title: WIRELESS COMMUNICATION ENABLED METER AND NETWORK

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- PRE-APPEAL BRIEF REQUEST FOR REVIEW -

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Appellants hereby request that a panel of Examiners formally review the legal and factual basis of the rejection in the above-identified application prior to the filing of an Appeal Brief. Appellants assert that the outstanding Final Office Action (now on Appeal by virtue of the concurrently filed Notice of Appeal) is clearly improper based upon errors in facts.

I. APPEALED REJECTIONS

Appellants request review of the following rejections presented in the Final Office Action dated April 10, 2006:

    (a) claims 82-83, 85-87, 89-93, 107-113, and 125-126, rejected under 35 U.S.C. §102(e), as allegedly being anticipated by <u>Meier '991</u> (U.S. Patent No. 6,407,991);

    (b) claims 94-97 and 105-106, rejected under 35 U.S.C. §102(e), as allegedly being anticipated by <u>Zintel '281</u> (U.S. Patent. No. 6,725,281);

    (c) claims 127 and 131-132, rejected under 35 U.S.C. §102(e), as allegedly being anticipated by <u>Riihinen '331</u> (U.S. Patent. No. 6,697,331);

    (d) claims 84 and 114-117, rejected under 35 U.S.C. §103(a), as allegedly being unpatentable over <u>Meier '991</u> in view of <u>Zintel '281</u>;

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(e) rejected claim 88, under 35 U.S.C. §103(a), as allegedly being unpatentable over Meier '991 in view of Devine '708 (U.S. Patent No. 6,606,708);

(f) claims 98-104, rejected under 35 U.S.C. §103(a), as allegedly being unpatentable over Zintel '281 in view of Devine '708;

(g) claims 118-124, rejected under 35 U.S.C. §103(a), as allegedly being unpatentable over Meier '991 in view of Devine '708; rejected claim 128, under 35 U.S.C. §103(a), as allegedly being unpatentable over Riihinen '331 in view of Bielfeld '949 (U.S. Patent No. 6,400,949);

(h) claims 129-130, rejected under 35 U.S.C. §103(a), as allegedly being unpatentable over Riihinen '331 in view of Vanucci '727 (U.S. Patent No. 5,459,727); rejected claims 133-134, under 35 U.S.C. §103(a), as allegedly being unpatentable over Meier '991 in view of Vimpari '671 (U.S. Patent No. 6,577,671); and

(i) claims 135-138, rejected under 35 U.S.C. §103(a), as allegedly being unpatentable over Meier '991 in view of Vimpari '671 and Agrawal '777 (U.S. Patent No. 6,075,777).

II. ARGUMENTS FOR TRAVERSAL

Regarding the anticipation rejections, Appellants rely on the well-established principle that a claim is anticipated *only if each and every element* as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. With respect to the obviousness rejections, Appellants rely on the first criteria for establishing a *prima facie* case of obviousness, which requires that there *must be some suggestion or motivation*, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

Appellants, therefore, traverse the prior art rejections under 35 U.S.C. §102(e) because, as will be evident by the following discussion, the asserted primary references fail to disclose, teach, or suggest the entire combination of elements recited by the claims. Appellants also traverse the prior art rejections, under 35 U.S.C. §103(a), because none the references, whether analyzed individually or in combination with the numerous secondary references, disclose, teach, or suggest the entire combination of claimed elements.

1. Claim Recitations.

Appellants submit that each of independent claims 82, 94, 107, 127, and 133 positively recites a "self configuring wireless network" and the use of "at least one self-configuring virtual node." Such features are amply supported by the embodiments disclosed

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in the written description. (*See,* Original Specification: page 11, line 9 – page 12, line 9; page 13, lines 4-20; page 20, lines 8-21; page 21, line 19-page 22, line 16; FIGs. 2, 5-8).

By way of illustration, the disclosed embodiments provide a wireless network comprising a plurality of wireless sub-networks (*i.e.,* piconet) which, in turn, comprise a plurality of self-configuring virtual nodes. (*See,* Original Specification: page 9, lines 10-15). The self-configuring virtual nodes are configured as individually-addressable wireless entities that are enabled for wireless communications. (*See,* Original Specification: page 11, lines 9-10). The self-configuring virtual nodes, are equipped with the capability of automatically executing a self-configuration cycle upon initialization or in the event of a disruption in the network structure.   That is, the virtual nodes are capable of self-initiating a rules-based process to establish connectivity and form a network. (*See,* Original Specification: page 20, lines 10-19).

As noted in the written description, wireless networks containing such self-configuration nodes do not have to depend on wired connections/networks nor do they have to rely on higher level entities to establish the network after disruptions. This is because the nodes can configure themselves to self heal and reestablish the network. (*See,* Original Specification: page 20, lines 8-16).

2. Why The References Fail to Teach The Claim Elements.

The Meier '991 reference is directed to network implementation in which a wireless sub-network bridges two or more *wired* sub-networks. Meier '991 therefore discloses the use of a hierarchical network in which a plurality of *wired* access points WDAPs **267, 263, 271, 273** facilitate communications for wireless remote stations **269, 275, 277, 279** and wireless communication devices **283, 284**. (*See,* Meier '991: col. 7, 10-20; FIG. 6).   The hierarchical organization is defined by a spanning tree structure residing within the wired access points WDAPs **267, 263, 271, 273**, designated as root nodes in the network, in which the WDAPs **267, 263, 271, 273** broadcast messages offering attachment to potential network nodes. (*See,* Meier '991: col. 7, lines 22-25, 44-50, FIG. 6).

In so doing, the network nodes are not self-configuring, as required by independent claims 82, 94, 107, 127, and 133. The network nodes are neither capable of self-initiating a process to form a network nor are they capable of executing a self-configuration cycle. Rather, the wired access points WDAPs **267, 263, 271, 273**, which are attached to established *wired* sub-networks, initiate the attachment of potential nodes in accordance with the

spanning tree structure. It is immaterial that the spanning tree structure is described as having dynamic or adaptive capabilities.

Appellants further submit that none of the applied references cure the deficiencies identified above relative to the Meier '991 reference and fail in their own right to teach each and every claim element. In particular, the Zintel '281 reference is directed to a Universal Plug and Play (UPnP) open network architecture. (*See,* Zintel '281: col. 4, lines 5-16). Regarding the configuration of network devices, Zintel '281 merely teaches that the UPnP protocol includes an automatic network introduction feature that establishes an appropriate configuration with an IP address for an embedded computing device **900** upon connection to a server computer on a computer network, so as to enable access to the device from a client. (*See,* Zintel '281: col. 49, lines 56-67; FIGs. 27, 28). To the extent that computing device **900** could be remotely construed as a "node" within the meaning of the claims, once embedded or plugged into the network, computing device **900** executes a series of steps (*e.g.,* announcement, discovery, response, autonet, and device description) to communicate with the server computer to achieve access to the network.

With this said, there is nothing in Zintel '281 that remotely teaches that the embedded computing devices **900** are capable of self-initiating a process to form a network or are executing a self-configuration cycle. Instead, by having to be already embedded into an established computer network to access the server computer and execute the access steps, the embedded computing device **900** cannot be construed as a self-configuration virtual node, as required by claims 82, 94, 107, 127, and 133.

The Riihinen '331 reference is directed to a cellular-based telecommunications network. (*See* Riihinen '331: col. 5, lines 32-46; FIG. 1). Riihinen '331 describes the operation of a transmission controller **612** for a transmitter retransmission and acknowledgment unit and a reception controller **622** for a receiver retransmission and acknowledgment unit. (*See,* Riihinen '331: col. 10, lines 26-31; FIGs. 7A, 7B). The transmission controller **612** performs a polling function **630** having a poll timer that ensures that feedback is received from the receiver and that the last segment in a transmission window of the transmission buffer is delivered. The poll timer does not expire if the requested feedback was lost and the poll timer may be started (or restarted) when one of three articulated conditions occurs. (*See,* Riihinen '331: col. 10, lines 44-63).

There is, however, nothing in the Riihinen '331 reference that teaches or suggests the use of self-configuring virtual nodes, as recited in claims 82, 94, 107, 127, and 133. That is, Riihinen '331 relates to the initiation of polling messages and acknowledgement responses, but remains silent with regard to nodes that self-initiate a process to form a network or nodes that are capable of executing a self-configuration cycle.

Moreover, as best understood, none of the secondary references, including the Devine '708, Bielfeld '949, Vanucci '727, Vimpari '671, and Agrawal '777 references, appear to teach or suggest the use of a self-configuring virtual nodes, as required by claims 82, 94, 107, 127, and 133.

For at least these reasons, Appellant submits that none of the references teach the claimed combination of elements recited by independent claims 82, 94, 107, 127, and 133. Accordingly, claims 82, 94, 107, 127, and 133 are patentable over these references. And, because claims 83-93, claims 95-106, claims 108-126, claims 128-132, and claims 134-138 depend from independent claims 82, 94, 107, 127, and 133, respectively, claims 83-93, claims 95-106, claims 108-126, claims 128-132, and claims 134-138 are patentable at least by virtue of dependency as well as for their additional recitations.

III. CONCLUSION

Appellants respectfully submit that, for at least the reasons detailed herein, the Examiner has not met the initial burdens associated with establishing anticipation or obviousness, as the references fail to teach or suggest all the features recited in the rejected claims. Appellants, therefore, submit that pending claims 82-138 are clearly patentable and a decision by the review panel to this effect is respectfully and earnestly solicited.

Respectfully submitted,

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